**IN THE UNITED STATES DISTRICT COURT**
**FOR THE WESTERN DISTRICT OF TEXAS**
**WACO DIVISION**

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| **DECAPOLIS SYSTEMS, LLC,**<br>**Plaintiff,**<br>**v.**<br>**ATHENAHEALTH, INC.,**<br>**Defendant.** | **Civil Action No. 6:21-cv-00391-ADA** |
| **DECAPOLIS SYSTEMS, LLC,**<br>**Plaintiff,**<br>**v.**<br>**ECLINICALWORKS, LLC,**<br>**Defendant.** | **Civil Action No. 6:21-cv-00502-ADA** |
| **DECAPOLIS SYSTEMS, LLC,**<br>**Plaintiff,**<br>**v.**<br>**MEDICAL SOFTWARE SOLUTIONS, INC.,**<br>**Defendant.** | **Civil Action No. 6:21-cv-00607-ADA** |
| **DECAPOLIS SYSTEMS, LLC,**<br>**Plaintiff,**<br>**v.**<br>**UNIVERSAL SOFTWARE SOLUTIONS, INC.,**<br>**Defendant.** | **Civil Action No. 6:21-cv-00656-ADA** |

**DECAPOLIS SYSTEMS, LLC,**

**Plaintiff,**

**v.**

**CONCEPTUAL MINDWORKS, INC.,**

**Defendant.**

**Civil Action No. 6:21-cv-00686-ADA**

**DEFENDANTS' OPENING CLAIM CONSTRUCTION BRIEF**

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## TABLE OF ABBREVIATIONS[1]

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|---|---|
| '"040 patent" | U.S. Patent No. 7,464,040 |
| '"048 patent" | U.S. Patent No. 7,490,048 |
| '"348 application" | Appl. No. 09/737,348 |
| "AIA" | America Invents Act |
| "Asserted Patents" | U.S. Patent Nos. 7,464,040 and 7,490,048 |
| "Boyer" | U.S. Patent No. 6,208,973 |
| "Defendants" | athenahealth, Inc.; eClinicalWorks, LLC; Medical Software Solutions, Inc.; Universal Software Solutions, Inc.; and Conceptual Mindworks, Inc. |
| "MPF" | Means-plus-function |

[1] Unless otherwise noted, all emphases herein have been added, and all internal case citations have been omitted.

The Asserted Patents claim computer-based systems and methods for managing electronic health records. The claimed systems perform functions such as sending and receiving data relating to patients, storing that data, automatically generating health insurance claims, controlling access to health records, and communicating with patients by sending notification reports. Using exclusively functional language to describe black-box computer components, the Asserted Patents claim those components not in terms of what they are, but instead in terms of what they do. Because those claim terms recite "function[s] without reciting sufficient structure for performing that function," they are MPF limitations under 35 U.S.C. § 112, ¶ 6, even though they do not use the word "means." *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015). As a *quid pro quo* for this MPF claiming, an algorithm for performing the claimed function must be disclosed in the specification. *See, e.g., Dyfan, LLC v. Target Corp.*, No. W-19-CV-00179-ADA, 2020 WL 8617821, at *2 (W.D. Tex. Nov. 25, 2020). No such algorithm is disclosed, thus rendering all four MPF limitations indefinite under 35 U.S.C. § 112. Because all asserted claims include at least one such MPF limitation, Defendants' constructions are case-dispositive.

This is not the first time that the inventor of the Asserted Patents—Raymond A. Joao—has improperly tried to claim a computer-based invention in strictly functional terms without disclosing a corresponding algorithm. This Court has recognized that closely analogous claim language from other Joao patents (i) invokes § 112, ¶ 6 even absent the term "means"; and (ii) is indefinite because Mr. Joao failed to disclose algorithms to perform the claimed functions. *Joao Control & Monitoring Sys., LLC v. Protect Am., Inc.*, No. 1-14-CV-134-LY, 2015 WL 4937464 (W.D. Tex. Aug. 18, 2015). The Court should reach the same conclusion here.

There are also two terms for which the parties agree that the plain and ordinary meaning applies, but for which the parties dispute the scope of that meaning. During the parties' meet-and-

confer on December 21, 2021, it became apparent that Plaintiff is seeking to expand the definition of "in response to" and "automatically" so as to fundamentally rewrite the claims. That should be rejected, and Defendants' proposed constructions should be adopted.

## I. THE ASSERTED PATENTS

The two Asserted Patents (i) were filed more than 20 years ago; (ii) name the same inventor; and (iii) are entitled "Apparatus and Method for Processing and/or for Providing Healthcare Information and/or Healthcare-Related Information." Their specifications are nearly identical, with few material differences: (1) their abstracts emphasize different aspects of electronic health records management; (2) the '048 patent includes the same 24 drawing sheets as the '040 patent, plus Figures 16A, 16B, 17A, and 17B; and (3) the '048 patent includes additional text at col. 43:63-51:33. Despite that overlap, the Asserted Patents are not directly related.

Both Asserted Patents "pertain[] to an apparatus and a method for processing and/or for providing healthcare information." ('040 patent at 1:18-20; '048 patent at 1:18-20.) The '040 patent claims relate to a computer-implemented system that receives certain patient-related information from a healthcare provider, stores that information, "automatically" generates an insurance claim "in response to" storing that information, and can automatically transmit that claim to a healthcare insurer or payer. ('040 Patent, Abstract.) By contrast, the '048 patent claims do not relate to insurance claims, but instead are directed to a computer-implemented system that processes a request to access, obtain, or alter a patient's healthcare record, and generates a message identifying the individual that made the request and the nature of the request, with that message being sent to the patient prior to the time that any such request has been processed. ('048 Patent, Abstract.) Although they are directed to different aspects of electronic health records management, the Asserted Patents use the same generic terminology. For instance, claim 1 of the '040 patent is directed to a three-element apparatus (a receiver, a database or memory device, and a processing

device), while claim 1 of the '048 patent uses similar nonce terminology for a two-element apparatus (a processor and a transmitter). Although the claims recite a laundry list of functions, the foregoing generic terminology is not sufficient structure for performing those functions.

The common specification of the Asserted Patents explains that "[t]he apparatus of the present invention **can also be programmed** in order to automatically generate and/or transmit" the claimed communications. ('040 Patent at 7:38-45; *see also id.* at 11:17-23.) The Asserted Patents do not teach how to program an apparatus to perform the claimed functions of automatic generating and transmitting (i.e., no algorithms are disclosed). Similarly, the Figures depict only generic, elemental computer components and flow charts reciting generic business method steps (none of which matches the particular steps in the claims asserted here). (*See, e.g.*, Figures 2-6.)

## II. PRINCIPLES OF LAW GOVERNING FUNCTIONAL CLAIMING

An inventor generally may not claim structural elements in purely functional terms. *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 12-14 (1946). Section 112, ¶ 6 is a partial exception to this rule, providing that a structural "element in a claim for a combination may be expressed as a means . . . for performing a specified function without the recital of structure, material, or acts in support thereof." 35 U.S.C. § 112.[2] While there is a rebuttable presumption that § 112, ¶ 6 applies only when "means" appears, this presumption "can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite . . . sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015).

[2] The Asserted Patents are governed by the pre-AIA version of 35 U.S.C. § 112, although as this Court has recognized, there are "no substantial differences" between § 112(f) of the AIA and the pre-AIA version of § 112, ¶ 6. *Dyfan*, 2020 WL 8617821, at *2 n.1.

An MPF claim term is limited to "only the structure . . . described in the specification as corresponding to the claimed function and equivalents thereof." *Williamson*, 792 F.3d at 1347. For MPF claims "in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." *Aristocrat Techs. Austrl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008); *see also Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008) (the specification must "disclose an algorithm for performing the claimed function" in a computer-implemented MPF claim to comply with § 112, ¶ 6). A generic computing device, such as "a general purpose computer or microprocessor," is insufficient corresponding structure. *Aristocrat*, 521 F.3d at 1333.

"Computer-implemented means-plus-function claims are indefinite unless the specification discloses an algorithm to perform the function associated with the limitation." *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012); *see also Dyfan*, 2020 WL 8617821, at *7 (finding more than two dozen MPF claims to be indefinite after concluding that the specification failed to disclose corresponding algorithms for claimed computer-based functions).

## III. THE MPF LIMITATIONS OF THE ASSERTED PATENTS ARE INDEFINITE

### A. "Receiver" MPF Terms (Claims 1 & 46 of the '040 Patent)

| Term/Phrase | Defendants' Proposed Construction[3] |
|---|---|
| a receiver, wherein the receiver receives information regarding an individual | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br>**Function**: "receives information regarding an individual"<br>**Structure**: None disclosed.<br>This claim term is indefinite for failing to disclose a structure (i.e., an algorithm) that corresponds to the claimed function. |

[3] Defendants eClinicalWorks, LLC and Medical Software Solutions, Inc. filed a petition for *inter partes* review of claims 1 and 46 of the '040 patent. Because the PTAB is not empowered to invalidate claims based on indefiniteness, it was not possible to raise these arguments there. *See, e.g., Samsung Elec. Am., Inc., v. Prisua Eng'g Corp.*, 948 F.3d 1342, 1353 (Fed. Cir. 2020).

| | |
|---|---|
| receiving information regarding the individual with a receiver | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br>**Function**: "receiving information regarding the individual"<br>**Structure**: None disclosed<br>This claim term is indefinite for failing to disclose a structure (i.e., an algorithm) that corresponds to the claimed function. |

Both asserted independent claims of the '040 patent recite a "receiver" that is described entirely in terms of its function ("receives/receiving information regarding an individual"), and its interaction with other parts of the claimed apparatus (i.e., "the receiver is associated with the database or the memory device and is located at a location remote from the first computer or remote from the first communication device," as set forth in claim 46). The '040 patent claims use "receiver" simply as a generic, black-box term that is the noun form of its "receiving" function. That invokes § 112, ¶ 6, even absent use of the term "means." *See, e.g., Vantage Point Tech., Inc. v. Amazon.com, Inc.*, No. 2:13-cv-909-JRG, 2015 WL 575167, at *15-17 (E.D. Tex. Feb. 11, 2015) (treating a term that "appears to be merely a noun form of the claimed . . . function" as MPF).

The written description is similarly devoid of any structural description of the claimed "receiver." It is identified as a literal black box in Figures 2-6, which are identical except for the numerical identifiers. Exemplary Figure 2 is shown below (annotated to highlight the "receiver"):

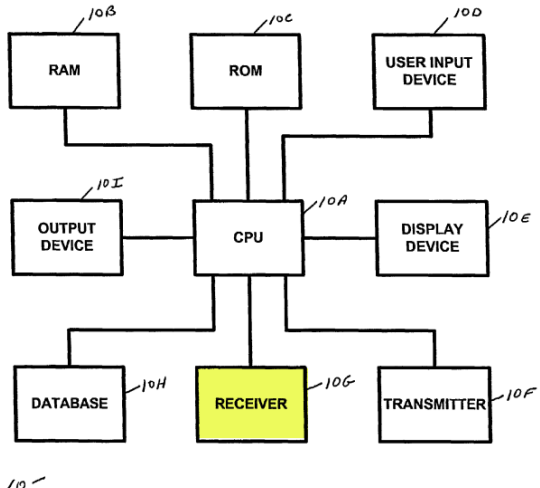



FIG. 2

The "receiver" is described only as "a receiver **10G**, for receiving signals and/or data and/or information from any one or more of the central processing computers **10**, the provider computer(s) **20**, the payer computers(s) **30** [sic], the patient computer(s) **40**, and the intermediary computer(s) **50**." ('040 patent at 16:46-52.) This same description is repeated for Figures 3-6, which describe generic communication devices utilized by the provider, payer, patient, and intermediary, respectively. ('040 patent at 22:23-29; 23:8-13; 24:59-65; 25:42-48.) This description teaches nothing about the structure of the black-box "receiver." Because no structure sufficient to carry out the receiving function is disclosed, the "receiver" terms are governed by § 112, ¶ 6. *See Media Rts. Techs., Inc. v. Cap. One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015) ("Nothing in the written description of the [asserted patent] adds sufficiently to the meaning of the term's structure; it only describes the term's function and interaction with other parts in the system.").

According to the claims of the '040 patent, the receiver must receive particular information ("information regarding at least one of a symptom, an examination finding, a diagnosis, a treatment, an administration of a treatment, and a procedure"), that is transmitted from a particular location ("a healthcare provider"), utilizing a particular transmission medium ("over at least one of the Internet and the World Wide Web"). The specification discloses no algorithm for performing these functions—no computer code, mathematical formula, sufficiently detailed flow chart, or other step-by-step description of how that function can be carried out. As a result, this claim is invalid as indefinite under § 112, ¶ 2. *Williamson*, 792 F.3d at 1354.

Plaintiff argues that this term needs "[n]o construction . . . when read in the context of the claim language," and cites several dictionary definitions. (*See* Ex. A at 1, 9.) Those definitions, which are entirely divorced from the context of the claims of the '040 patent, only underscore that "receiver" is an MPF term, and that it is indefinite. For instance, Plaintiff asserts that this term

should be defined as "[a]n electro-mechanical device for converting electrical energy into sound waves. See also earphone." (*Id.*) Similarly, Plaintiff asserts that this term should also be defined as a "system that converts electric waves into a visible or audible form," like a telephone receiver. (*Id.*) These definitions have nothing to do with the claimed "receiver"; an earphone or telephone cannot perform the sort of "receiving" function that is claimed, which underscores that this generic "receiver" term does not connote sufficient structure for performing the claimed functions.

### B. "Processing Device" MPF Terms (Claims 1 & 46 of the '040 Patent)

| Term/Phrase | Defendants' Proposed Construction |
|---|---|
| a processing device, wherein the processing device processes the information regarding an individual, and . . . information for at least one of storing the information regarding an individual in the database or the memory device and updating the healthcare record or the healthcare history of, for, or associated with, the individual, and further wherein the processing device automatically generates an insurance claim in response to the storing of the information regarding an individual in the database or the memory device or the updating of the healthcare record of the healthcare history of, for, or associated with, the individual, and further wherein the processing device transmits the insurance claim | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br><br>**Function(s)**: "processes the information regarding an individual and information for at least one of storing the information regarding an individual in the database or the memory device and updating the healthcare record or the healthcare history of, for, or associated with, the individual"; "automatically generates an insurance claim in response to the storing of the information regarding an individual in the database or the memory device or the updating of the healthcare record of the healthcare history of, for, or associated with, the individual"; "transmits the insurance claim"<br><br>**Structure**: None disclosed<br><br>This claim term is indefinite for failing to disclose a structure (i.e., any algorithms) that corresponds to the claimed functions. |
| generating an insurance claim, wherein the insurance claim is automatically generated by a processing device in response to the storing of the information regarding the individual in the database or the memory device or the updating of the healthcare record or the healthcare history of, for, or associated with, the individual | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br>**Function**: "automatically generating an insurance claim in response to the storing of the information regarding the individual in the database or the memory device or the updating of the healthcare record or the healthcare history of, for, or associated with, the individual"<br>**Structure**: None disclosed |

| | |
|---|---|
| | This claim term is indefinite for failing to disclose a structure (i.e., an algorithm) that corresponds to the claimed function. |

The '040 patent claims recite a "processing device" that is described as performing several functions relating to insurance claims: (1) processing certain patient-related information (claim 1); (2) automatically generating an insurance claim in response to the storing of that patient-related information (claims 1 and 46); and (3) transmitting the insurance claim to a healthcare insurer or payer (claim 1). In the context of the '040 patent claims, "processing device" is indistinguishable from the term "processing means"; the "processing device" is defined entirely in terms of what it does (i.e., process, generate, and transmit information relating to insurance claims in response to storing of patient-related information). Thus, although the word "means" does not appear in the claims, the use of nonce term "device" in conjunction with one of the claimed functions (processing) does not provide sufficient structure, and § 112, ¶ 6 applies. *Williamson*, 792 F.3d at 1350 ("Generic terms such as 'mechanism,' 'element,' '**device**,' and other nonce words that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word 'means' because they 'typically do not connote sufficiently definite structure' and therefore may invoke § 112, para. 6.").

The specification likewise provides no structural description of the claimed "processing device." The term "processing device" appears only in the claims of the '040 patent and its Abstract (which essentially replicates the claim language without providing any description of the structure of the "processing device"). The '040 patent frequently refers to a generic "central processing unit" or "CPU," as well as to a "microprocessor." (*See, e.g.*, '040 patent at 16:20-21; 22:47-48.) None of these references connotes sufficient structure to perform the multiple steps outlined in the '040 patent claims, such as "automatically generating insurance claims in response to the storing of" patient-related information. On the contrary, the specification clarifies that those generic computer

components must be "programmed in order to automatically generate and/or transmit any of the "communications, described herein." ('040 patent at 7:38-45; *see also id.* at 40:40-46 ("[T]he present invention can provide for the automatic and/or for **the programmed submission of healthcare claims**, claim forms, claim requests, benefit requests, etc.").) The '040 patent therefore describes a system whereby a generic processing device, such as a microprocessor or CPU, must be specially programmed to perform the claimed functions. That is not a sufficient disclosure of the claimed structure, and "the fact that one of skill in the art could program a computer to perform the recited functions cannot create structure where none otherwise is disclosed." *Williamson*, 792 F.3d at 1351. The term "processing device" thus is subject to §112, ¶ 6.

Indeed, Mr. Joao used similar terminology in a different set of patents that generally relate to "systems for remotely controlling and/or monitoring devices such as appliances or other equipment." *Joao*, 2015 WL 4937464, at *1. Those Joao claims included multiple references to a "processing device," which this Court found was a "means-plus function term . . . [d]espite the fact that the claims do not employ the traditional 'means' signal word," because of "the consistent purely functional drafting of the claims—and lack of a corresponding structure." *Id.* at *9. This Court's prior construction for analogous language from other Joao patents further confirms that the "processing device" limitations above must be construed in accordance with § 112, ¶ 6.

As with the patent considered by the Federal Circuit in *Williamson*, the '040 patent "makes clear" that the claimed functions "must be implemented in a special purpose computer—a general purpose computer programmed to perform particular functions pursuant to instructions from program software." *Williamson*, 792 F.3d at 1352. Under those circumstances, "the specification [must] disclose an algorithm for performing the claimed function." *Id.* No such algorithm is disclosed. Although its written description is lengthy—with 24 drawing sheets and 46 columns of

text—the '040 patent never discloses a structure for performing automatic generation of an insurance claim in response to storing information. And while the '040 patent includes flow charts, those simply replicate certain claimed functions (while omitting others), without providing any insight as to how to carry out those functions. Figure 14B is representative, as it merely recites the steps of updating patient records, generating a claim form, and transmitting that claim form (with the same color-coding used to annotate Figure 14B below):

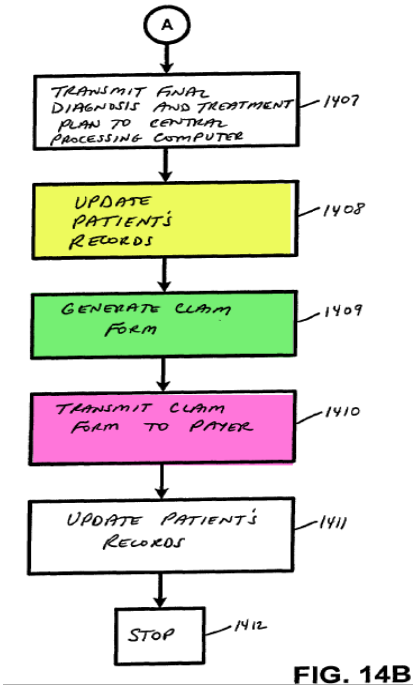



FIG. 14B

The description of these generic flowcharts offers no further structural insight. The specification provides that "[i]n another preferred embodiment" illustrated in FIGS. 14A and 14B, "the present invention can provide for automatic claim submission via the central processing computer **10** once a final diagnosis and treatment has been prescribed by a provider and/or upon the occurrence of an examination and/or the administration of treatment." ('040 patent at 39:42-48.) But this automatic claim submission does not occur "in response to" storing information; such claim generation and submission is triggered "upon the occurrence of an examination and/or the administration of treatment." ('040 patent at 40:9-38.) This description is therefore not "clearly

link[ed]" to the recited function, and cannot satisfy the Section 112 disclosure requirements. *See, e.g. Williamson*, 792 F.3d at 1352 ("Structure disclosed in the specification qualifies as 'corresponding structure' if the intrinsic evidence clearly links or associates that structure to the function recited in the claim."). And even if it were clearly linked to the claimed function, then it would still fail to disclose a corresponding structure because it merely recites a function without describing the steps for how to actually perform it (i.e., no algorithm is disclosed). This is precisely the scenario that this Court encountered in *Joao*, when it determined that in contrast to "the unique function of" the "processing device" limitation, the "specification's disclosure of supporting structure" was so "broad and generic" that "the device terms are indefinite." *Joao*, 2015 WL 4937464, at *9. The Court should reach the same conclusion here for the same reasons.

### C. "Processor" MPF Terms (Claim 1 of the '048 Patent)

| Term/Phrase | Defendants' Proposed Construction |
|---|---|
| a processor, wherein the processor processes a request to at least one of access, obtain, change, alter, and modify, information contained in a patient's healthcare record or a patient's healthcare file of a patient, wherein the processor determines whether an individual or entity is authorized to at least one of access, obtain, change, alter, and modify, the information contained in a patient's healthcare record or a patient's healthcare file, and further wherein the processor generates a notification report | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br><br>**Function(s)**: "processes a request to at least one of access, obtain, change, alter, and modify, information contained in a patient's healthcare record or a patient's healthcare file of a patient"; "determines whether an individual or entity is authorized to at least one of access, obtain, change, alter, and modify, the information contained in a patient's healthcare record or a patient's healthcare file"; "generates a notification report"<br>**Structure**: None disclosed<br><br>This claim term is indefinite for failing to disclose a structure (i.e., any algorithm) that corresponds to the claimed functions. |
| processing, with a processor, a request by a person or an entity to at least one of access, obtain, change, alter, and modify, the information contained in an individual's or patient's | This is an MPF limitation that must be construed in accordance with pre-AIA 35 U.S.C. §112 ¶ 6.<br>**Function(s)**: "processing a request by a person or an entity to at least one of access, obtain, change, alter, and modify, the information contained in an individual's or |

| | |
|---|---|
| healthcare record or an individual's or patient's healthcare file | patient's healthcare record or an individual's or patient's healthcare file"<br>**Structure**: None disclosed<br>This claim term is indefinite for failing to disclose a structure (i.e., any algorithm) that corresponds to the claimed functions. |

As with the '040 patent, the '048 patent includes a black-box processing element, which is recited using slightly different terminology—i.e., as a "processor" instead of a "processing device." The "processor" of the '048 patent must perform three different functions: (1) processing a request to access, obtain, or change information in a healthcare record (claims 1, 2, and 20); (2) determining whether such request is authorized (claim 1); and (3) generating a notification report, which must contain "an actual change, alteration, or modification, sought to be made or made to the information contained in a patient's healthcare record" (claim 1). As this Court has recognized, the word "processor" refers to a "general-purpose component," which generally does not "provide sufficient structure" to perform "special-purpose computer functions." *Dyfan*, 2020 WL 8617821, at *6. Here, three "special-purpose computer functions" must be performed by the black-box processor, and the claims provide no structure sufficient for performing those functions.

The written description likewise fails to disclose sufficient structure. The term "processor" appears only in the '048 patent claims and in its Abstract (where the claim language is essentially just repeated, without any explanation of its structure). As noted above, the Asserted Patents frequently refer to a generic "central processing unit" or "CPU," as well as to a "microprocessor." (*See, e.g.*, '040 patent at 16:20-21; 22:47-48.) None of these references connotes sufficient structure to process the claimed requests relating to electronic health records, determine whether access is authorized, and generate the claimed notification reports. And as with the '040 patent, the '048 patent likewise contains generic flowcharts and accompanying text that appear to relate to certain of the claimed functions performed by the processor. (*See* '048 patent, Figs. 16A and

16B; 45:8-47:59.) For instance, the '048 patent notes that "[a]t step **1604**, the central processing computer **10** can also determine whether the user is authorized to access, obtain, change, alter, or modify, the requested patient healthcare record(s) or file(s)." (*Id.* at 46:3-7.) But the '048 patent does not disclose how this special purpose can be accomplished, or any structure, other than a general-purpose "central processing computer," that is involved in performing this claimed function. The same is true for generating a notification report. (*Id.* at 46:44-59.)

When faced with special-purpose processing functions like those in the '048 patent claims, courts have treated a claimed "processor" as an MPF term. For instance, a claimed "processor for associating . . . content data with dispatch record data and generating the authentication data" was found to invoke § 112, ¶ 6 because it needed to be programmed to perform special processing, data generating, and authenticating functions. *GoDaddy.com LLC v. RPost Commc'ns Ltd.*, No. 14-cv-126-PHX-JAT, 2016 WL 212676, at *62 (D. Ariz. Jan. 19, 2016); *see also e.g.*, *Konami Gaming, Inc. v. High 5 Games, LLC*, No. 2:14-cv-01483-RFB-NJK, 2018 WL 1020120, at *13-14 (D. Nev. Feb. 22, 2018) (rejecting argument that "processor" connoted "adequate structure for the" claimed functions and treating it as an MPF term).

For the reasons discussed above, there is no algorithm for carrying out the particular claimed functions that the "processor" must perform, and therefore the "processor" terms of the '048 patent are indefinite. *See, e.g.*, *Konami*, 2018 WL 1020120, at *15 (invalidating claims directed to a "processor" because the specification disclosed no corresponding "algorithm").

### D. The "Transmitter" MPF Term (Claim 1 of '048 Patent)

| Term/Phrase | Defendants' Proposed Construction |
|---|---|
| a transmitter, wherein the transmitter transmits the notification report . . . at least one of during, concurrently with, at a same | This is an MPF limitation that must be construed in accordance with pre-AIA §112 ¶ 6.<br><br>**Function(s)**: "transmits the notification report at least one of during, concurrently with, at a same time as, and prior to a |

| | |
|---|---|
| time as, and prior to a completion of, at least one of an accessing, an obtaining, a changing, an altering, and a modifying, of the information contained in a patient's healthcare record or a patient's healthcare file | completion of, at least one of an accessing, an obtaining, a changing, an altering, and a modifying, of the information contained in a patient's healthcare record or a patient's healthcare file"<br>**Structure**: None disclosed<br><br>This claim term is indefinite for failing to disclose a structure (i.e., any algorithm) that corresponds to the claimed functions. |

Claim 1 of the '048 patent recites yet another black-box computer component for performing a claimed function: a transmitter that transmits a notification report at a very particular time (i.e., at least prior to the completion of accessing, obtaining, or changing a patient's healthcare file). As with the MPF limitations discussed above—including the processor that processes, and the receiver that receives—the noun "transmitter" is claimed in terms of its verb (transmitting), which is a well-recognized hallmark of MPF claiming. *Vantage Point Tech., Inc.*, 2015 WL 575167, at *15-17. Moreover, as with the "receiver" discussed above, the "transmitter" is depicted repeatedly as a literal black-box, with no associated description other than its function:

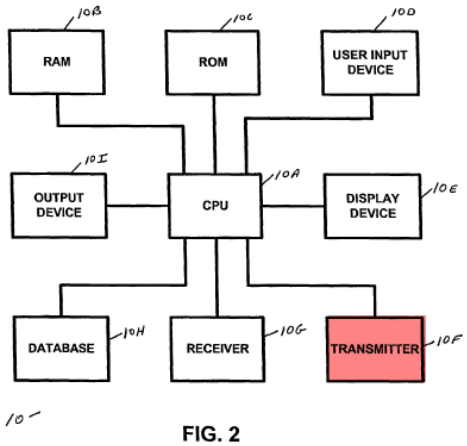



FIG. 2

The specification is silent on the structure of this black box, noting only that "[t]he central processing computer **10** also includes a transmitter(s) **10F**, for transmitting signals and/or data and/or information." ('048 patent at 17:34-40; *see also id.* at 23:12-18; 23:62-24:1; 25:48-54; 26:31-38.) Moreover, the manner of achieving the claimed timing for the transmission of a notification report (which must be either "concurrently with, at a same time as, [or] prior to" the

completion of certain enumerated activities) is never explained. That phrasing appears only in the Abstract and in the claims of the '048 patent. On the contrary, the '048 patent specification refers only to the fact that "the notification reports described herein . . . can be transmitted to the respective patient, individual, healthcare provider, healthcare payer, insurance provider, and/or third party, in real-time, in a time-delayed manner, and/or in any other appropriate manner." ('048 patent at 47:52-57.) This generic functional language discloses no structure capable of accomplishing the special transmission timing claimed in the '048 patent. Because the intrinsic record discloses no structure sufficient to carry out that particularized function, this element must be treated as an MPF term. *See Williamson*, 792 F.3d at 1351-52. And because the specification discloses no corresponding algorithm, the "transmitter" term is indefinite. *See id.* at 1352-54.

## IV. "In Response To" (Claims 1 & 46 of '040 Patent)

| Defendants' Proposed Construction | Plaintiff's Proposed Construction |
|---|---|
| Plain and ordinary meaning, which is: in reaction to, i.e., as a result of | No construction required when read in the context of the claim language. |

The parties dispute the scope of the plain and ordinary meaning of "in response to," which appears in both independent claims of the '040 patent.[4] This phrase is part of a broader claim limitation that describes what triggers the automatic generation of an insurance claim. (*See, e.g.*, '040 patent claim 1 (claiming that the processing device "automatically generates an insurance claim **in response to the storing of the information** regarding an individual in the database").) During the parties' December 21 meet-and-confer, Plaintiff asserted that the phrase "in response

[4] Because there is a dispute over the scope of this claim term, it must be construed by the Court; merely adopting an unspecified "plain and ordinary meaning" would be insufficient. *See, e.g.*, *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1319 (Fed. Cir. 2016) (overturning a district court's adoption of the "plain and ordinary meaning" for a claim term because that "left [a disputed] question of claim scope unanswered") (citing *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008)).

to" means anything that occurs subsequently—i.e., so long as an insurance claim is generated after an individual's information is stored in a database, that claim would have been generated "in response to" the storing of that information. Plaintiff's proposed construction is inconsistent with the intrinsic record, and attempts to rewrite the claim term. By contrast, Defendants' proposed construction is consistent with both the intrinsic and extrinsic record. It should be adopted.

The claim term "in response to" is used in the '040 patent to connote a **causal** relationship (i.e., the automatic generation of an insurance claim is caused by/results from the storing of information), rather than merely a **temporal** relationship (i.e., the automatic generation of an insurance claim merely occurs after information is stored). For instance, the '040 patent notes that "the present invention can provide notification to any respective party, electronically and/or otherwise, **in response to** the occurrence of an event, happening, and/or occurrence." ('040 patent at 37:34-36.) This sharply contrasts to other disclosures in the '040 patent, which invoke temporal language. (*See, e.g.*, '040 patent at 42:39-45 ("User responses, including diagnostic and treatment decisions, and/or performance, can be recorded and/or can be stored and, **thereafter** the information can be utilized to evaluate the user . . . .").) In other words, it is necessary but not sufficient for the automatic generating of insurance claims to occur after storing the information required in the '040 patent claims; the storing must also have triggered claim generation.

This interpretation is likewise consistent with the narrowing amendments made during prosecution. As originally filed, the '348 application included 20 claims that made no mention of generating and transmitting insurance claims. (Ex. B at 144-45.) After those claims were cancelled, Mr. Joao pursued claims directed to generation of insurance claims, but that lacked the requirement that those claims be generated "in response to" anything. (*Id.* at 394-401; 456-57.) In order to overcome a prior-art-based rejection, the term "in response to" was inserted. (*Id.* at

775.) Having narrowed the scope of the claims to secure issuance of those claims, Plaintiff cannot now broaden the claims to recapture the very subject-matter that it surrendered. *See, e.g., N. Am. Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1346 (Fed. Cir. 2005).

Finally, Defendants' proposed construction is also consistent with multiple dictionary definitions, which define "response" as meaning "in reaction to, i.e., as a result of." (Ex. C (defining "response" as "something constituting a reply or a reaction"); Ex. D (defining "response" as "an act or action of responding (as by an answer)"; "reaction"); Ex. E (defining "response" as "an answer or reaction"); Ex. F (defining "response" as "the act of responding; reply or reaction").) Plaintiff offers no dictionary definitions to support its interpretation. Nor could it; under Plaintiff's interpretation, Christmas would be "in response to" Halloween by virtue of the fact that it comes later in the year. Plaintiff's interpretation is untenable and should be rejected.

## V. "Automatically" ('040 patent, claims 1 and 46)

| Defendants' Proposed Construction | Plaintiff's Proposed Construction |
|---|---|
| Plain and ordinary meaning, which is: independently, without human intervention | No construction required when read in the context of the claim language. |

The parties agree that the plain and ordinary meaning of "automatically" should apply, but disagree as to whether this term requires action to occur "without human intervention."[5] Consistent with Federal Circuit law, the Court should resolve this conflict. *O2 Micro*, 521 F.3d at 1360. Plaintiff's position contradicts both the intrinsic and extrinsic records. And critically, when Mr.

[5] Plaintiff cites a dictionary definition: "automatic – self-regulating or self-acting; capable of producing a desired response to certain predetermined conditions." Because this definition establishes that the parties generally agree that "automatically" connotes acting "independently" (Defendants' articulation), *i.e.*, "self-acting" (Plaintiff's definition), Defendants' brief focuses on the "without human intervention" portion of Defendants' proposal.

Joao added "automatically" to the claims during prosecution to distinguish the prior art, he disclaimed human intervention from its scope.

The intrinsic record consistently and uniformly uses the word "automatically" to refer to activity (i.e., insurance claim generation) conducted by a computer component or piece of software independently, without human intervention. Indeed, the term "automatically" was added to overcome a rejection over prior art in which such activity involved a human, giving rise to a disclaimer of claim scope and excluding human intervention from the meaning of the claim term "automatically." *See SpeedTrack, Inc. v. Amazon.com, Inc.*, 998 F.3d 1373, 1379 (Fed. Cir. 2021).

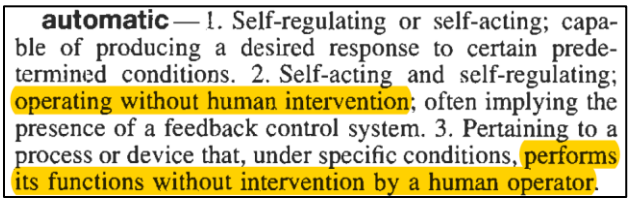
The '040 patent specification explains that one of the problems in the prior art was slowness and inefficiency associated with "insurance and/or benefits claims [that] take place in a paper-based environment." ('040 patent at 2:8–10.) The '040 patent purports to solve this problem by automating certain activities, such as the claim generation and submission process, through the use of a computer or software (e.g., central processing computer 10) acting without human intervention. (*E.g., id.* at 6:54–58, 7:38–45, 10:46–54, 11:13–23, 39:42–46, 40:40–46, 43:63–44:4.) The specification does not disclose any "automatic" action that is performed with human involvement. Instead, **the terms "automatic" or "automatically" are used in the specification only to describe activities and processes performed by the computer or software itself**, not by a human. (*See, e.g., id.* at 6:54–58 ("automatic claim submission via the central processing computer . . ."), 39:42–46 (similar), 7:38–39 ("The apparatus . . . can also be programmed to be . . . activated automatically"), 7:40–45 (similar), 11:13–16 (similar), 43:63–65 (similar).) The converse is also true: when an action is performed with human involvement, the specification **always** expressly identifies a human actor (i.e., a "provider," a "patient," or a "doctor"), and **never** describes the action as "automatic." (*See, e.g., id.* at 38:36–64 (describing actions performed by a

"provider or patient"), 40:9–19 (describing actions performed by a "medical doctor").) Similarly, when the specification describes "automatic" claim generation or submission, it distinguishes those actions from those that involve humans. (*See id.* at 40:16–38 (after a doctor determines and transmits a diagnosis and/or treatment plan to the central computer, **the computer** generates "a claim form which can meet the formal claim submission requirements of the patient's payer or insurance company"), 39:42–46 ("automatic submission via the central processing computer 10" only occurs "**once** a final diagnosis and treatment has been prescribed **by a provider** and/or upon the occurrence of an examination and/or the administration of a treatment.").)

Moreover, during prosecution of the '040 patent, the patentee disclaimed any meaning of "automatically" that includes human involvement by amending its claims to include this term to overcome a prior art rejection over Boyer, in which the claimed processes were performed with human intervention (i.e., non-automatically). (Ex. B at 473 (rejecting claim 1 (then claim 21) as anticipated by Boyer).) In the portion of Boyer cited by the Examiner, Boyer discloses a system in which a healthcare provider could "enter[ a] preliminary diagnosis into [a] claim application" as part of the claim generation process. (Ex. K at 13:25-30.) The Examiner rejected the applicant's claims as anticipated by Boyer, noting that Boyer disclosed "a processing device, wherein the processing device processes the information regarding an individual and generates an insurance claim." (Ex. B at 473.) To overcome this rejection, the applicant amended the anticipated claim language to require (1) that the processing device **automatically** generate information regarding an insurance claim and (2) that the insurance claim is suitable for being **automatically** submitted to an insurer or payer. (*Id.* at 487-88, 495-96.) The applicant further confirmed during a subsequent interview "that the amendment to the cl[ai]ms was intended to clarify that the processing device **automatically** generates information regarding an insurance claim for

submission to an insurer or a healthcare payer" and "contended that such a limitation distinguished over Boyer which merely generates an insurance claim based on a form filled out by a healthcare provider." (*Id*. at 534.) Thus, the applicant admitted that "automatic" generation of information does not involve intervention by a human, whether by filling out and submitting a claim form or otherwise. Plaintiff may not recapture what it has disclaimed by pursuing an overbroad plain and ordinary meaning. *See SpeedTrack*, 998 F.3d at 1377.

Defendants' proposed construction is also consistent with the extrinsic evidence Plaintiff cites (the 1999 edition of the Modern Dictionary of Electronics). This dictionary defines "automatic" to mean "without human intervention":


**automatic** — 1. Self-regulating or self-acting; capable of producing a desired response to certain predetermined conditions. 2. Self-acting and self-regulating; operating without human intervention; often implying the presence of a feedback control system. 3. Pertaining to a process or device that, under specific conditions, performs its functions without intervention by a human operator.

(Ex. G, Decapolis002259 at 2278.) Defendants have also identified numerous other dictionary definitions confirming that automatically means "without human intervention." (*See* Ex. H (Chambers Dictionary defining "automatic" as "working by itself **without direct or continuing human operation**."); Ex. I (Encarta World English Dictionary defining "automatic" as "STARTING OR FUNCTIONING BY ITSELF started, operated, or regulated by a process or mechanism **without human intervention**."); Ex. J (American Heritage English as a Second Language Dictionary defining "automatic" as "[a]cting or operating **without the control of a human being**; self-operating or self-regulation.").)

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**CERTIFICATE OF SERVICE**

I certify that a true and correct copy of the above and foregoing document was served on all counsel of record via electronic delivery on January 4, 2022.

Dated: January 4, 2022

*/s/ Andrew G. Pearson*
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